# **Louisiana Delta Community College**

Expanded Course Syllabus. Physics 211

Faculty Name Dr. Richard Gibbs
Office Location 127 Coenen Hall
Office Phone Number 342- 3729
Email Address rgibbs@ladelta.cc.la.us
Office Hours 1:00 PM-3:00PM Wed or by appointment

1. Course Name: General Physics I

2. Course Prefix and Number: PHYS 211

**3. Course Description:** Laboratory designed to accompany PHYS 210, General Physics 1; Laboratory activities are used to enhance the content and learning outcomes established for PHYS 210 for mechanics, heat, and sound.

4. Credit hours: 1

**5. Prerequisites and Co-requisites:** Successful completion of MATH 111, Plane Trigonometry,

with a grade of C or higher

Co requisites: Concurrent enrollment in PHYS 210, General Physics I

6. Text: College Physics Lab Manual

Author: Wilson, Buffa Publisher: Prentice Hall

6<sup>th</sup> Edition

- **8. Learning Outcomes:** On completion of this course, the student will be able to:
- 1. Use SI (metric) units to express the measurements of physical quantities
- 2. Add and subtract vectors by the graphical and component methods.
- 3. Define and apply formulas involving speed, velocity, and acceleration.
- 4. Use motion graphs top determine position, velocity, and acceleration.
- 5. Define force, state and apply Newton's Laws of Motion and the Law of Universal Gravitation.
- 6. Describe forces in fluids, state and apply Pascal's Principle, Archimedes' Principle and Bernoulli'.
- 7. Define work, energy, and power.
- 8. Identify the forms of energy and apply the Law of Conservation of Energy.
- 9. Define momentum and apply the Law of Conservation of Momentum.
- 10. Calculate formulas involving rotational motion
- 11. Define torque and moment of inertia and state the relations hip between torque, moment of inertia, and angular acceleration.
- 12. Define and calculate the location of the center of mass and center of gravity.
- 13. State the conditions for static equilibrium and create free-body diagrams
- 14. Define stress and strain

- 15. Explain the difference between heat and temperature
- 16. State the methods of transfer of thermal energy.
- 17. Identify the physical properties that affect the thermal expansion of an object.
- 18. Define simple harmonic motion and identify objects which exhibit SHM.
- 19. State the characteristic of sound and how sound is propagated.
- 20. Define the intensity and identify sources of sound.

# 9 and 11. Tentative course schedule for semester (by day or week)

- 1. Lab orientation:
  - a)Lab reports
  - b)Data analysis (%difference and standard deviation)
- 2. Density
- 3. Force Table #1
- 4. Force Table #2
- 5. Acceleration
- 6. Speed of sound
- 7. Circuits #1
- 8. Conductivity checker(construct)
- 9. Focal length
- 10. Archimedes' Principle
- 11. Flow rates
- 12. Viscosity
- 13. Lens Magnification
- 14. Multiple lens analysis

## 10. Evaluation/Assessment Measures:

- a. Experiment grades are averaged
- b. Attendance
- c. Quality of reports
- d. Evaluation and Grading System:

Grading Scale (example)

90 - 100 A

80 - 89 B

70 - 79 C

60 - 69 D

0 - 59 F

# 12. College and Classroom Polices

A. Students with Disabilities

The Office of Student Counseling and Disability Services coordinates campus-wide efforts to provide services and accommodations for students with disabilities. In compliance with the American Disabilities Act (ADA), students with documented disabilities who need course accommodations, have emergency medical information or require special arrangements for building evacuation should contact the instructor within the first two weeks of class at the number or office listed above.

#### B. Attendance

Attendance policies correspond to those listed in the *Delta Academic Catalog*. Class attendance is regarded as an obligation as well as a privilege, and all students are expected to attend regularly and punctually all classes in which they are enrolled. A student shall submit written excuses for all class absences to the appropriate instructor within three class days after the

student returns to the respective class. Students are responsible for all class work missed regardless of the reason for the absence.

D. Academic Support Services: Delta provides students with resources and support outside of the classroom through the Library/LRC in Coenen 150 (<a href="http://www.ladelta.cc.la.us/library">http://www.ladelta.cc.la.us/library</a>) and a Student Success Center which provides workshops, resources, and tutorial support.

#### E. Electronic Devices/Other noise-making devices

Cellular telephones, beepers, and other noise-making devices must be turned off during class time. If this policy is not adhered to, you will be asked to leave the room to avoid further interruptions.

## F. Safety Regulations

No firearms, weapons, tobacco products, alcoholic beverages, or illegal drugs are permitted in the classroom. In the event you do not adhere to this policy, you will be asked to leave the classroom and expulsion from the college is possible.

#### C. Academic Integrity

Louisiana Delta Community College upholds standards of academic integrity of its students and faculty. Academic integrity is essential to assure learning through assessment. Students are responsible for being aware of and adhering to academic rules and regulations for the college and classroom as defined in the *Delta Academic Catalog* and *Delta Student Handbook*. Academic dishonesty includes but is not limited to cheating, fabrication, plagiarism, interference, misrepresentation, violation of class rules, and fraud. Identified instances of academic misconduct or dishonesty warrant disciplinary actions by the instructor or college. Please refer to Delta's *Student Handbook* for more information.

#### LOUISIANA DELTA COMMUNITY COLLEGE CODE OF STUDENT CONDUCT

All members of the College community are expected to respect the principles of honesty and mutual trust embodied in the honor code. Students are responsible for preparing their own written work in every class unless specifically permitted by the instructor to combine efforts on an assigned project. Students are expected to understand the meaning of plagiarism and to avoid all suspicion of plagiarism in papers prepared. Furthermore, students are expected neither to sanction nor tolerate violation of the honor code by others.

Students will not give or receive any unauthorized aid on any examination or paper. If a student witnesses anyone else doing so, that student must be reported immediately to the faculty member and/or the appropriate College administrator.

#### **ACADEMIC MISCONDUCT**

#### Types of Academic Misconduct (1.01)

Although all academic misconduct is wrong, premeditated acts of academic misconduct represent a greater threat to the integrity of the College than do unpremeditated acts of academic misconduct.

# **Categories of Academic Misconduct (1.02)**

**Cheating** is the intentional use of inappropriate assistance, information, materials, or study aids in any academic exercise. Cheating includes the use of unauthorized assistance, information, or materials on tests, homework, quizzes, papers, projects, and all other academic assignments. Additionally, students who provide such unauthorized assistance are also guilty of cheating.

**Fabrication** is defined as altering official college documents, forging signatures of college officials or other individuals, or changing grades and other academic records. Fabrication also includes submitting false records to gain admission to the College. Furthermore, any oral or written misrepresentation of truth in any communication with College administrators, faculty, or staff is also fabrication.

**Plagiarism** involves submitting another person's ideas, words, data, arguments or sentence structure as the student's own without proper documentation.

**Misrepresentation** is intentionally presenting oneself as someone else, or intentionally misrepresenting a condition or situation to gain credit or concessions on academic work, including make-up tests, projects, and class assignments.

**Violation of class rules** is the intentional failure to follow the class policies concerning assignments and behavior.

Other forms of academic misconduct include **complicity**, the willing involvement with others in any academic misconduct; **software fraud**, the unlawful downloading and copying of computer software used in the creation of academic work; and **multiple submissions of work**, handing in academic work that was done previously by the student for another class, or by someone else.

# **Disciplinary Sanctions for Academic Misconduct (1.03)**

Depending on the type of violation, the number of times a student has committed an offense, and the discretion of the instructor, penalties may include any combination of the following:

- 1. Loss of partial credit for the assignment.
- 2. Reduced grade for the course.
- 3. Grade of "F" for the course.
- 4. Zero assigned to test or assignment.
- 5. Academic Probation
- 6. Counseling
- 7. Academic Suspension
- 8. Expulsion

## Administration of Penalties (1.04)

Instructors assign penalties to the student based on the above criteria. Student appeals of the penalty will be directed to the appropriate Academic Supervisor, or, if necessary, to the Dean of Instruction.

Should the student's violation of the Academic Honesty Policy warrant probation, suspension, or expulsion, the matter will be referred to the Admissions and Academic Appeals Committee. Appeals of penalties will be directed to the Vice Chancellor of Academic and Student Affairs.

The complete Academic Misconduct policies and the Due Process Procedure (sections 1.05-1.06) are listed in the Student Handbook.